REMARKS

This Amendment is in response to the Office Action dated January 28, 2008. In the Office Action, claims 1, 3-16 and 18-40 were rejected. With this Amendment, claim 18 is amended to correct claim dependency. Otherwise all pending claims remain unchanged. The amendment to claim 18 does not change the scope of the claims and therefore no further search need be performed. It is respectfully submitted that all pending claims 1, 3-16 and 18-40 are in condition for allowance.

Interview Summary

Applicant's attorney would like to thank Examiner Doug Godbold for courtesies extended during a telephone interview on April 3, 2008. During the interview, Applicant's attorney presented the Examiner deficiencies that exist in the Menezes et al. reference currently being used against pending claims in the application.

§ 102 Claim Rejections

Claims 1, 7, 8, 16, 18-23, 39, and 40 were rejected under 35 U.S.C. 102(b) as being anticipated by Menezes et al. (US 2003/0023422). Of these claims, claims 1 and 23 are independent.

In regards to independent claim 1, it is respectfully submitted that Menezes et al. fails to describe "calculating a score for each of the set of transfer mappings that describe a select node of the input semantic structure using a statistical model." Instead, Menezes describes (in paragraph 66) that "matching component 224 searches for the best set of matching transfer mappings in database 218 that have matching lemmas, parts of speech and other feature information." Menezes further describes in paragraph 66 and also lays out in paragraph 120 that "the set of best matches is found based on a predetermined metric. For example, transfer mappings having larger (more specific) logical forms may illustratively be preferred to transfer mappings having smaller (more general) logical forms. Among mappings having logical forms of equal size, matching component 224 may illustratively prefer higher frequency mappings. Mappings may also match overlapping portions of the source logical form 252 provided that they

do not conflict with each other in any way. A set of mappings collectively may be illustratively preferred if they cover more of the input sentence than alternative sets." While Menezes et al. finds best matching transfer mappings for a source logical form, claim 1 actually calculates a score for each transfer mapping that describes a select node of the input semantic structure. The Examiner considers the metrics illustrated on page 9, table of 1 of Menezes et al. as used for calculating a score. However, these metrics are used when finding best transfer mappings for an entire source logical form. There is no indication that these metrics are used to score transfer mappings for a select node.

In addition, it is respectfully submitted that Menezes et al. fails to describe "selecting which of the transfer mappings that describe the select node has a highest score" as claimed in claim 1. As previously discussed, Menezes et al. finds the best transfer mappings for a source logical form. Menezes et al. fails to determine which score of a transfer mapping calculated for a select node is the highest score. The Examiner considers paragraph 121 of Menezes et al. as describing selecting a highest score of the scored transfer mapping for a select node. However, paragraph 121 merely states that "a subset of matching transfer mappings is selected." There is no indication that a highest score let alone a highest score of transfer mappings for a select node is selected.

Still further, it is respectfully submitted that Menezes et al. fails to describe "using the selected transfer mapping to construct the output semantic structure" as claimed in claim 1. The Examiner considers paragraph 121 of Menezes et al. as describing this. However, paragraph 121 merely states that "transfer mappings in the subset are combined into a transfer logical form from which the output text is generated." There is no indication that the selected transfer mapping that has a highest score that describes a select node is used to construct an output semantic structure.

It is respectfully submitted that claim 1 is in condition for allowance. It is respectfully submitted that claims 7, 8, 16, 18-22 and 39-40 are also in condition for allowance as depending on an allowable base claim. However, claims 7, 8, 16 and 39-40 are also in condition for allowance for additional reasons. For example, Menezes et al. fails to describe providing transfer mappings for the select node as well as any child nodes of the select nodes as claimed in claim 39. Furthermore, Menezes et al. fails to describe any of the steps claimed in claim 40. In

particular, Menezes et al. fails to describe combining scores of the highest scoring mappings that describe the child node with a score of the select node to find the scores for each set of transfer mappings that describe the select node. Although Menezes et al. discusses alignment, this is not similar to calculating a highest score. Still further, Menezes et al. fails to describe the steps claimed in claim 18. In particular, Menezes et al. fails to describe recursively calculating a score for each level of nested subtrees, calculating a score for the root transfer mapping and combining the score for each subtree with the score for the root transfer mapping.

In regards to independent claim 23, it is respectfully submitted that Menezes et al. fails to describe "a decoding component configured to score each of the set of transfer mappings that corresponds with a select portion of the input semantic representation and to select which of the transfer mappings that correspond with the select portion of the input semantic representation has a highest score." While Menezes et al. finds best matching transfer mappings for a source logical form, claim 23 actually uses a decoding component that scores for each of the set of transfer mappings that corresponds to a select portion of the input semantic representation. The Examiner considers the metrics discussed in paragraph 7 of Menezes et al. as describing such a decoding component. However, these metrics are used when finding best transfer mappings for an entire source logical form. There is no indication that these metrics are used to score transfer mappings for a select portion of the input semantic representation.

It is respectfully submitted that claim 23 is in condition for allowance.

§ 103 Claim Rejections

Claims 3-6, 9-15, and 24-38 were rejected under 35 U.S.C. 103(a) as being unpatentable over Menezes et al in view of Brown et al.(US 5477,451). Of these claims, claim 30 is independent.

It is respectfully submitted that claims 3-6, 9-15 and 24-29 are in condition for allowance as depending on allowable base claims 1 or 23. However, claims 3-6, 9-15 and 24-29 are in condition for allowance for additional reasons. For example, the combination of cited references fail describe "calculating a score for each transfer mapping in the set of transf er mappings that describe a select node" by "computing separate scores for a plurality of models and combining

the separate scores to determine the score for each transfer mapping that describes a select node of the input semantic structure" as claimed in claims 9-15. The Examiner insists that Brown et al. describes scoring using two different models and combining the scores of the two different models. However, Brown et al. fails to correct the deficiencies of Menezes et al. The combination of references fail to describe combining scores of transfer mappings that describe a select node using different models.

In regards to claim 30, the combination of cited references fail to describe "scoring each of the set of transfer mappings that describe a select node of the input semantic structure with a target language model that provides a probability of sequences of nodes appearing in an output semantic structure having a plurality of nodes that relate to an output work string." While the combination of cited references finds best matching transfer mappings for a source logical form and describes a target language model, claim 30 actually scores each of the set of transfer mappings that describe a select node of the input semantic structure with a target language model. The combination of cited references fail to describe this.

It is respectfully submitted that claim 30 is in condition for allowance. It is respectfully submitted that claims 31-38 are also in condition for allowance as depending on an allowable base claim.

It is respectfully submitted that all pending claims 1, 3-16 and 18-40 are in condition for allowance. Favorable action is respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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